AI as Social Glue: Uncovering the Roles of Deep Generative AI during Social Music Composition

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Abstract

Recent advances in deep generative neural networks have made it possible for artificial intelligence to actively collaborate with human beings in co-creating novel content (e.g. music, art). While substantial research focuses on (individual) human-AI collaborations, comparatively less research examines how AI can play a role in human-human collaborations during co-creation. In a qualitative lab study, we observed 30 participants (15 pairs) compose a musical phrase in pairs, both with and without AI. Our findings reveal that AI may play important roles in influencing human social dynamics during creativity, including: 1) implicitly seeding a common ground at the start of collaboration, 2) acting as a psychological safety net in creative risk-taking, 3) providing a force for group progress, 4) mitigating interpersonal stalling and friction, and 5) altering users' collaborative and creative roles. This work contributes to the future of generative AI in social creativity by providing implications for how AI could enrich, impede, or alter creative social dynamics in the years to come.